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ABSTRACT

This study sought to determine the most important goals of the University of the Americas-Puebla (Mexico) through a needs-analysis survey of the faculty. A survey instrument was developed which included a series of 58 goal statements. The university's 168 faculty members were asked to rate the degree to which each goal is being met, rate the degree to which each goal should be met, and indicate the relative importance of each goal. Overall rankings and rankings according to faculty affiliation (schools of engineering, social sciences, humanities, or business administration) are presented. The study weighted each of the three criteria to determine the "weighted need" or importance of each goal, combining the discrepancy between "is" and "should be" with the relative importance of the goal. Through this method it found that the most important individual goals were the conduct of basic and applied research and contribution to the general advancement of knowledge. By combining the goals into 10 related categories, it found that research-related goals were classified as most important, followed by academic goals, student personal development and learning commitment, and academic-organizational climate. The least important categories were extracurricular and the professional development of students. (Contains 30 references.) (MDM)

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Determining University Goals in an Institution of Higher Education in México

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DETERMINING UNIVERSITY GOALS

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Abstract

The main goal of this study was to provide decision makers of the Universidad de las Américas-Puebla (MEXICO) with information regarding priority goals for the institution. In the same way, the concept of "weighted need" was applied and discussed. This study involved several steps within the Needs Assessment methodology. All of the professors in each of the schools in the university were asked to participate in the study. The major findings of the study were: 1) The Research, Academic, and Student Personal Development and Learning Commitment were the three, out of ten, most important goal areas to be first attained for the university; and 2) The concept and procedure of "weighted need" proved to be of importance in establishing the priority of a set of goals and it represents an important concept in the needs assessment methodology in general.

DETERMINING UNIVERSITY GOALS IN AN INSTITUTION OF HIGHER EDUCATION IN MÉXICO

Introduction

Effective educational planning involves knowledge of the problems and needs which are present in the institution where new activities and programs will be carried out. The solutions to these problems and needs should be responsible and correspond to the actual state of affairs in the educational context. One of the most important problems that institutions of higher education face is the redefinition of their role for the world of the year 2000. In Mexico, in particular, this is an issue that has put the accent on areas such as planning, evaluation, institutional goals, research, and relationship to industry. In order to be financed, institutions of higher learning in Mexico have to cope with increasingly more stringent criteria of success. In this way, planning has become a key concept in their struggle for success.

In order for education to be responsive and responsible to society, planners must carefully examine the nature of the external environment in which they operate, as well as institutional internal strengths, weaknesses, and balances. Educational planning should not be a process in a vacuum. It

should respond to both societal and institutional needs. The purpose of this study is aimed at identifying and establishing, in order of priority, the goals of an institution of higher education in Mexico in such a way that the method may be used as a model for other institutions in Mexico or elsewhere. An underlying assumption is that institutional goals should be based on a firm consideration of faculty expressed perceptions of the actual and desired conditions as well as the relative importance of a set of proposed goals. In other words, every program and activity aimed at improving the functioning of the University should be justified and based on a clear understanding of the actual state of affairs regarding the needs and problems recognized by informed members of the community, i.e., the professors, as well as the academic administrators personnel in the University such as deans of schools, and chairs of departments. Besides, if faculty is vital to institutional development and quality, increased attention should be given to its relationship to institutional goals, program adoption and implementation. According to Astin (1985), judgments about quality of education are an everyday activity. A set of generalizable procedures and instruments that could be used to identify and prioritize institutional goals and needs is of great importance to those

people in charge of coordinating and making decisions regarding programs, resources, policies, procedures for staff and institutional development. This study was conducted through the application of a needs assessment methodology. The procedures and instruments were tested and used with professors in the University of the Americas-Puebla (MEXICO).

One of the most critical problems that institutions of higher learning face is the lack of a clear definition and priority of goals and needs to be addressed and satisfied. As mentioned before, the planning of new activities fundamentally requires as a basis, the recognition of the most important institutional goals, as well as of the gap between an actual and a desired condition for each of those goals. Without a clear understanding about what the educational system must achieve, improve, or solve, no reforms of that system make sense since there are no criteria with which to allow the establishment and judgment of their functions and effectiveness (Peterson, 1973; Smith, 1990). In other words, if there is not a clear understanding of the current and actual situation within a context, no activity will be able to be truly justified in the sense of a solution to a problem, practical or

theoretical, because such activity does not correspond to the reality and/or needs of the area within the context.

The search for effectiveness is a problem that is of interest to institutions of higher learning in underdeveloped countries, as well as in developed countries. Therefore, while, for example, in the United States the search for educational effectiveness arises from social and governmental pressures for the rational use of financial resources (Rowell, 1975; LeBlanc, 1988), in underdeveloped countries the problem includes, besides limited resources, the need for overcoming the imbalances of resources which are, to some degree, characteristics of the educational planning process of those countries (Coombs, 1968; Wilson, 1974; Lenth, 1990).

As already stated, planning is the first element for the proper functioning of any system. In fact, planning is the key component of a system approach given that appropriate evaluation and provisions for revising and renewing the system are also considered and combined (Kaufman, 1977; Smith, 1990). Kilburg (1979), mentions that service systems for society have used needs evaluation procedures for 150 years. He also mentions that the needs assessment methodology is a necessary part in the evaluation of human service programs.

In the systems analysis model, needs assessment is a method of continuous application during the planning, implementation, and evaluation cycle. Consequently needs assessment should be a regular and rational activity following established routines through which the information systems and the proposed objectives should be used.

Concept of Need

There is not a generally accepted and useful substantive definition of "need". The concept of need seems to vary among authors and existing models of needs assessment in the social sciences as well as, of course, among different disciplines. Within the social sciences, some authors have defined need as a deficiency that distracts from a person's well being (Atwood, 1982). Scriven and Roth (1982), and Smith, (1990) define need as a gap between a present and a satisfactory, important, or desired situation. The latter do not draw any implication about the existence of a state of deficiency or deprivation. After a review of definitions of needs, Kaufman (1977, 1983), and Kimpston (1982), found that sometimes the concept of need is conceived of only as a noun -as a gap between current and desired or required outcomes- and at other times as an outcome gap or as a process or solution gap.

In spite of the great variety of definitions of need, Burton and Merill (1977), and Kaufman (1979), point out that all of these describe the same central idea: a need is present when there is a discrepancy or gap between the way things "are" and the way things "should be". Price (1982), and Bradshaw (1977), affirm that it is useful to define a need as a gap between a current set of circumstances and some altered or more desirable set of circumstances.

Kaufman, one of the major contributors to both the theory and practice of needs assessment, puts needs assessment in the context of organizational problem solving and renewal. His Organizational Elements Model, Kaufman (1977, 1983); Kaufman and Stakenas, (1981); Kaufman and Vergara, (1984) is devoted to the process of identifying, defining, and relating what organizations use, do, and deliver to society. Therefore, this model has both an external and internal frame of reference.

In what Kaufman and Vergara (1984), define as organizational outputs, they include the goals or ends of the organization. Realistic needs assessment begins with determining what these goals are, and second, takes the goals as the point of departure for needs identification (gaps between "is" and "should be") as well as for establishing

priorities for action in each one of the levels of the organization.

Numerous authors have emphasized the importance of the needs assessment technique as a mean to obtain useful information in the planning, designing, and development of a great variety of activities. For example: counseling services, Gill and Fruehling (1979) and Merril, Oetting, and Hurts (1974); minority group needs, Webster, Sedlaceck and Miyares (1980); adult education, McKinley (1973); academic needs of undergraduate students, Weissberg, Berentsen, Cote, Cravey, and Heath (1982); goals of secondary schools, Matczynski, and Rogus (1985); and determinations of community needs, DeVillaer (1990), and Phillips, and Tucker (1975), have been the focus of needs assessment. In general, it was concluded that the use of the needs assessment technique constituted, in each case, a useful procedure that helped in identifying and listing in order of importance the needs of institutions and departments. Together with valid recommendations, we can also state that, by means of this technique, it is possible to develop programs that correspond faithfully to perceived needs and reflect judicious use of resources.

Method

As was already mentioned, this study attempted to determine the most important goals of an institution of higher education in Mexico. This purpose was carried out through the perceptions of the faculty of the institution. Without denying the importance that objective data have regarding a number of aspects of the proposed goals for the University (trends in the number of students, economic present situation, and financial perspectives for the university), a methodology directed at determining the perceptions of informed sources of information regarding institutional goals is very valuable.

Setting. The University of the Americas-Puebla (MEXICO) is an institution of higher education with approximately 4750 students and 150 full-time and 150 part-time professors. The University is comprised of four schools, and each of these respectively form one-fourth of the total student and faculty population. These schools are: Engineering (ENG), Social Sciences (SOC), Humanities (HUM), and Business Administration (ADM). Around thirty different programs exist in the four schools: twenty-five at the Licenciatura (Bachelors with thesis) level and five at the Masters level.

The student enrollment at the Licenciatura level is approximately 4500 and 250 at the Master's level.

Instrumentation. Goals of the Universidad de las Américas, Puebla. This instrument was aimed at identifying and establishing, in order of priority, the goals of the University of the Americas-Puebla. Thus, the purpose of this instrument was to determine the absolute (difference between "is" and "should be") and relative importance of each of a set of institutional goals. After a careful revision of relevant materials this instrument was constructed through using the following documents and procedures: a) an establishment of the philosophy of the university, b) a draft that exists about this university´s goals, c) the Institutional Goals Inventory developed by the Educational Testing Service, and d) the suggestions and input of a committee specially appointed for this study.

This instrument included a series of 58 goal statements in ten different areas to be described later. The professors were asked: a) to rate the degree to which they perceive each university goal is currently being achieved (IS condition) as well as the degree to which it should be achieved (SHOULD BE condition), and b) to indicate the relative importance of each of the goals with respect to each other. A scale from one to

five was used with which each professor rated every goal according to a) his/her perceived actual IS, and b) according to his/her perception about the SHOULD BE condition. However, professors were instructed to rate the "should be" and the "relative importance" conditions for each goal considering their views on the importance of each goal within five years from now; that is, with a futuristic perpespective. The "Relative Importance" of each goal with respect to each other was determined according to the procedure described by Lodge (1981). In general, the professors were asked to indicate the importance of each goal taking into account that the first goal had an arbitrary value of 50 points. That is, if a professor considered the second goal to be twice as important as the first one, then he/she should have assigned a value of 100 points. If, on the other hand, a professor considered the third goal to be half as important as the first one, then he/she was supposed to assign a value of 25 points.

Pilot Study

The purpose of the pilot study was to determine the validity and reliability of the instrument "Goals of the Universidad de las Americas-Puebla". Validity. All of the School Deans and some Heads of Department were individually asked to write their comments about each of the

goals in relationship to the university´s philosophy, as well as about the clarity of the instructions. Additionally, and after the instrument was corrected, a small group of 30 professors were asked to individually work with the instrument "Goals of the Universidad de las Americas-Puebla". They were asked to express their comments about the procedure, and about the instrument (wording, clarity of the statements, and clarity of the instructions.) At the end of this interviewing procedure, the judges were asked to indicate (yes or no) if each of the items truly represented an institutional goal. A 100% agreement was obtained. Reliability. Reliability refers to the degree in which an instrument is consistent in measuring what it is sets out to measure. In order to establish the reliability of the instruments, the Cronbach´s Alpha procedure was used. A different coefficient was computed for each condition as well as for each instrument. A coefficient of .934 was obtained for the "IS" condition. A coefficient of .944 was obtained for the "SHOULD BE" condition. And, an Alpha coefficient of .941 was obtained for the "RELATIVE IMPORTANCE" condition. From these results, we concluded that the instrument is highly reliable for each condition.

Final Study

Subjects. Population.- The population for this study included all of the professors currently teaching in the Universidad de las Americas- Puebla. The total number of professors in the study was of 168. The distribution of professors by school was as follows: School of Business Administration: 26; School of Humanities: 40; School of Engineering: 61; School of Social Sciences: 41. A copy of the instrument "Goals of the Universidad de las Americas-Puebla" was reproduced and distributed to the different subjects and groups in the study.

Results

The indicator that was used to set the priority goals was that of "Weighted Need" (W.N.) or "Total Importance" (Garduño, 1994). This concept refers to the degree of importance of a goal when the absolute and the relative importance are combined. In other words, this measure combines the concept of "need" of a goal (as a discrepancy between the "is" and the "should be" conditions) with the relative importance of the goal. What this new concept tells us is the order in which each goals is to be accomplished. This concept would tell us what are the goals in most need of attention. The "Total Importance" or "Weighted Need", is obtained through multiplying the value of the absolute

importance of a goal times the value of the relative importance of that goal.

Table 1 shows the ranking of the goals for the university taking into account their "weigthed need". We can observe in this table that goals number 41, 17, 12, 9, 43, 20, 24, 13, 47, 4, 11, and 26 were the most important goals for the university. In this table we can observe that by virtue of the professors´s perception of a greater need for conducting basic and applied research in the institution (goal 41) in comparison with, for example, goal 26 (to create an institution known widely as an intellectually exciting and of academic excellence place in the nation and abroad) which was rated as the most important goal in relative terms, goal 41 happen to occupy the first position in the ranking when we compute the "weigthed need".

Insert Table 1 about here

The results of goal 41 are consistent with the results of goal 17 (to contribute, through research, to the general advancement of knowledge). In this way, we can say that even though research related goals are not considered as the most important goals in relative terms (goals 41 and 17),

Table 1

Means and standard deviations for the "is" and "should be" (SH.B.) conditions. "Relative importance" (R.I.) and "weighted need" (W.N.) for each university goal. The goals are listed in accordance to the "weighted need" value.

		IS	SH-B	R.I.	W.N.
Goal 41	Mean	2.4	4.5	78	161
	S.D.	0.9	0.6		
Goal 17	Mean	2.5	4.5	80	160
	S.D.	0.8	0.6		
Goal 12	Mean	2.6	4.6	80	158
	S.D.	0.9	0.6		
Goal 9	Mean	2.4	4.5	74	158
	S.D.	1	0.6		
Goal 43	Mean	2.2	4.3	72	154
	S.D.	0.8	0.7		
Goal 20	Mean	2.6	4.6	77	150
	S.D.	0.9	0.6		
Goal 24	Mean	2.4	4.5	73	150
	S.D.	1	0.7		
Goal 13	Mean	2.6	4.5	75	143
	S.D.	0.8	0.6		
Goal 47	Mean	2.6	4.5	73	138
	S.D.	0.8	0.6		
Goal 4	Mean	2	4.2	59	132
	S.D.	0.9	0.8		
Goal 11	Mean	1.5	3.9	55	130
	S.D.	0.7	1		
Goal 26	Mean	3.1	4.7	85	128
	S.D.	0.8	0.6		
Goal 38	Mean	2.4	4.3	69	128
	S.D.	0.9	0.8		
Goal 39	Mean	2.5	4.3	68	121
	S.D.	0.9	0.7		
Goal 6	Mean	1.9	4	56	117
	S.D.	0.8	0.8		
Goal 27	Mean	2.3	4.1	65	117
	S.D.	0.8	0.8		
Goal 57	Mean	2.1	4	61	113
	S.D.	0.9	0.8		
Goal 33	Mean	2.5	4.2	65	113
	S.D.	0.9	0.8		

		IS	SH-B	R.I.	W.N.
Goal 28	Mean	2.34	4	58	99
	S.D.	0.99	0.9		
Goal 16	Mean	2.2	4	55	99
	S.D.	0.87	1		
Goal 18	Mean	2.98	4.4	70	99
	S.D.	0.94	0.8		
Goal 56	Mean	2.3	4	58	96
	S.D.	0.74	0.9		
Goal 42	Mean	2.62	4.2	60	96
	S.D.	1.01	0.7		
Goal 36	Mean	2.34	4	58	95
	S.D.	0.9	0.8		
Goal 35	Mean	2.52	4.1	58	92
	S.D.	0.88	0.7		
Goal 55	Mean	2.48	4	59	89
	S.D.	0.9	0.8		
Goal 54	Mean	2.08	3.7	55	88
	S.D.	0.97	0.9		
Goal 15	Mean	2.64	4.1	61	87
	S.D.	0.92	0.8		
Goal 40	Mean	2.37	3.8	59	87
	S.D.	0.84	0.8		
Goal 48	Mean	1.94	3.6	51	82
	S.D.	0.9	1.1		
Goal 32	Mean	1.95	3.6	49	82
	S.D.	0.83	1		
Goal 21	Mean	2.95	4.2	65	81
	S.D.	0.89	0.8		
Goal 3	Mean	2.11	3.7	51	79
	S.D.	0.88	0.9		
Goal 29	Mean	1.79	3.4	47	78
	S.D.	0.8	1.1		
Goal 23	Mean	2.94	4.2	63	77
	S.D.	0.91	0.8		
Goal 14	Mean	2.69	4	58	75
	S.D.	0.77	0.7		

(table continues)

Goal 7	Mean	2.3	4.1	60	111
	S.D.	0.8	0.9		
Goal 19	Mean	2.3	4.1	61	111
	S.D.	0.8	0.7		
Goal 44	Mean	2.3	4.1	60	109
	S.D.	0.8	0.8		
Goal 37	Mean	2.3	4.1	61	108
	S.D.	0.9	0.7		
Goal 5	Mean	2.3	4.1	57	108
	S.D.	0.9	0.8		
Goal 45	Mean	2.3	4	61	105
	S.D.	0.9	0.9		
Goal 10	Mean	1.7	3.7	52	105
	S.D.	0.7	1		
Goal 2	Mean	2.9	4.5	65	102
	S.D.	1	0.7		
Goal 49	Mean	2	3.9	55	102
	S.D.	0.8	0.9		
Goal 53	Mean	2.6	4.1	64	100
	S.D.	0.9	0.8		
Goal 25	Mean	2.2	4	57	99.2
	S.D.	0.9	0.8		

Goal 46	Mean	2.24	3.7	51	75
	S.D.	0.8	0.9		
Goal 58	Mean	2.67	3.9	55	69
	S.D.	0.95	1		
Goal 22	Mean	2.57	3.9	53	69
	S.D.	0.95	0.9		
Goal 1	Mean	2.72	4	50	65
	S.D.	0.78	0.6		
Goal 50	Mean	2.26	3.6	47	65
	S.D.	0.86	0.9		
Goal 31	Mean	3.54	4.1	63	63
	S.D.	0.91	0.8		
Goal 34	Mean	3.31	4	62	62
	S.D.	0.92	0.8		
Goal 52	Mean	2.44	3.7	48	60
	S.D.	0.75	0.9		
Goal 8	Mean	2.17	3.5	42	57
	S.D.	0.83	0.9		
Goal 30	Mean	2.7	3.8	54	57
	S.D.	0.88	0.8		
Goal 51	Mean	2.69	3.6	45	45
	S.D.	1.01	1.1		

they become the most important goals because the gap between the "is" and the "should be" conditions is big for those goals. In other words, professors perceive a greater need for the research activity than for the academic excellence (goal 26) in the institution; need which has an impact on the relative importance, producing a high "weighted need" value.

Goals 8, 30, 51, and 52, obtained the lesser "weighted need" of all. These goals refer respectively: to encourage students to express themselves artistically, e.g. in music, painting, film making; to participate in an institutional exchange program through which students may study on several campuses during their years as students; to ensure the freedom of students and faculty to choose there own life styles (living arrangements, personal appearance, etc); and to develop a broad and vigorous program of extracurricular activities and events for students.

Additionally, as can be observed in table 1, most of the goals have a standard deviation of less than one. This is important because it constitutes an indicator of the consistency in the ratings given to the "is" and to the "should be" conditions by all of the professors in the university. In fact, only four goals have a standard deviation greater than

one. Another important aspect is that there were no goals with a mean rating of less than 1.5 for the "is" condition. This reflects that all of the professors in the university perceive that there are no goals of no importance.

In order to have a better grasp of the most important goals for the University and for each of the schools, taking the goals in categories instead of in an individual way, all of the 58 goal statements were classified in ten different categories. This was made through an analysis of the goals, as well as through a series of meetings with a group of professors. Following this procedure, a 95% agreement among the "judges" was obtained. Next, there is a description of each goal area:

- Pedagogical Development (PD): Goals related to the improvement of pedagogical procedures. It includes experimenting measurement procedures in the classroom, as well as innovating educational methods.

- Academic (AC): Goals related to the creation or development of new educational programs, as well as conducting advanced studies in different fields. It also includes goals aimed at developing the University as a place with academic excellence.

- Academic-Organizational Climate (AOC): Goals related to the professors´ job in the institution. Goals aimed at improving positive attitudes and strong commitment of professors toward the University. It also includes freedom to personal life styles.

- Research (RES): The goals included in this area refer to the development of basic and applied research. The practice of consulting, through research, is also included.

- Academic Freedom and Expression (AFE): The goals in this area are aimed at respecting academic controversial points of view which are presented in the classroom.

- Extracurricular (EXT): Goals aimed at developing cultural and artistic activities in the University, as well as creating or improving a positive attitude to these activities on the part of students.establishing a relationship between the University and the society, in general, in the country. The purpose of these goals are to improve and develop society as well as to satisfy its needs. The individual, the community, the region, the country, as well as the government are included.

- University-Society Relationship. Goals aimed at establishing a relationship between the University and the society, in general, in the country. The purpose of these goals

are to improve and develop society as well as to satisfy its needs. The individual, the community, the region, the country, as well as the government are included.

- Professional Development of Students (PDS): Goals related to the establishment of knowledge and skills which are necessary for adequate professional performance. It also includes opportunities for institutional exchange.

- Student Personal Development and Learning Commitment (SPDLC): Goals related to the personal development of students as well as to the increment of their ability to undertake self-directed learning. It also includes helping students developing a sense of self-worth, and a capacity to have an impact on events.

- Commitment with Society on the part of Students (CSS): Goals directed at developing a sense of social commitment of students toward society. Goals related to help students develop a a general understanding and critical evaluation of prevailing practices and values in Mexican society are also included.

Table 2 shows the "weighted need" value for each area. Data are presented for the university and for each school.

Insert Table 2 about here

According to the data of table 2, the Research area -the research related goals- was classified as the most important area to be first accomplished for the University, as this is determined by the mean of the "weighted need". This area was followed, in order of importance, by the Academic, Student Personal Development and Learning Commitment, Academic-Organizational Climate, Commitment with Society on the part of students, Academic Freedom and Expression, Pedagogical Development, University-Society Relationship, Professional Development of Students, and Extracurricular areas.

Regarding the schools, we can observe that the School of Engineering has the highest mean value of "weighted need" for the "Research" area. In other words, the School of Engineering considers this area as having the highest priority in comparison to the other schools in the University.

Table 3 presents a summary of the rankings among the university and schools. The rankings are listed in accordance to the value of their "weighted need"

Table 2
This table presents the "weighted need" value for the university and for each school in each goal area.

		SCHOOL			
AREA	UNIVERSITY	ADM	HUM	ENG	SOC
RES	144	149	137	158	125
AC	126	141	140	114	125
SPDLC	111	116	154	85	121
CSS	102.2	95	162	73	116
AOC	104.6	108	135	95	95
AFE	102.2	90	133	89	112
USR	97.2	83	127	76	132
PD	98.3	102	124	82	100
PDS	92.6	104	128	72	92
EXT	70.56	72	113	44	92

Insert Table 3 about here

As we can observe, there exists a relative agreement among schools concerning the areas most in need of attention. This is also true when we compare the most important areas to be accomplished by the four schools with the most important areas to be first addressed by the University. In this sense, only the School of Humanities and the School of Social Sciences considered the areas of "Commitment with Society on the Part of Students" and of "University-Society Relationship", respectively, as the most important areas to be attained in comparison to the area of "Research" which is in most need of attention for the University in general. The University, in general, considered the area of "Commitment with Society on the Part of Students" in fourth place, and the area of "University-Society Relationship" in the seventh place. The School of Humanities considered the areas of "Academic" and "Research" to be in third and fourth place in terms of need of attention.

Regarding the "Professional Development of Students" area, the School of Business Administration considered this area to be in fourth place to be attained. However, the

Table 3
Ranking of the areas listed in accordance to the "weighted need" value.

AREAS	UNIVERSITY	ADM	HUM	ENG	SOC
Research	1st	1st	4th	1st	2nd
Academic	2nd	2nd	3nd	2nd	2nd
Student Personal Development and Learning Commitment	3rd	3rd	2nd	5th	3rd
Commitment with Society on the Part of Students	4th	7th	1st	8th	4th
Academic-Organizational Climate	5th	4th	5th	3rd	7th
Academic Freedom and Expression	6th	8th	6th	4th	5th
University-Society Relationship	7th	9th	8th	7th	1st
Pedagogical Development	8th	6th	9th	6th	6th
Professional Development of Students	9th	5th	7th	9th	8th
Extracurricular	10th	10th	10th	10th	9th

University in general considered this area to be in the ninth place of importance to be attained. One area in which practically all the schools are in agreement in terms of its importance for attention, is the "Extracurricular" area. This area is considered to be the least important to be attained.

Conclusions

Concerning the main purpose of this study, that is, regarding the question of what are the most important goals to be accomplished for the University, we have several points to consider.

1.- A need exists for each of the University's goals. The results obtained from a series of "t" tests indicated that all discrepancies between the "should be" and the "is" conditions were statistically significant. We can say that some action has to be developed to satisfy those needs. 2.- From the results obtained through using the magnitude estimation scaling procedure (the "relative importance" condition) we can say that, indeed, there are some goals that are considered as of more importance than others. However, because this procedure lacks an estimation of the "need" for the goal (the absolute importance ingredient,) we can not use it appropriately to determine the most important goals to be first accomplished for the university.

From the two points just considered, we can draw conclusions about the convenience of using the "weighted need" procedure for the setting of goal priorities. In this way, we can conclude that the most important goals to be firsts accomplished for the University are those goals with the highest "weighted need" value. In the same way, through determining the "weighted need" value of each area, it was possible to identify the five most important areas. However, a decision will have to be made by the university's authorities concerning whether to consider goals or areas first. Regarding the question of: Do schools differ in the rankings regarding the different goal areas and in accordance to the "weighted need", we have that it seems that there is a considerable agreement among the schools and the university regarding the areas in most need of attention. However this was not the case for every area. This finding, is to be of importance when planners and decision makers in the University get to the step of resources allocation. As mentioned above, they will also have to take into account what goals, the university in general, as well as each of the schools in particular, value the most.

The impact that this study has had on decision making has been very valuable. First, because one of the results was

the "need" between the "is" and "should be" conditions, a series of meetings were conducted with the participation of all the faculty. The purpose of these meetings was to identify the problems for accomplishing the institutional goals. To this end, all of the available university information dealing with the goals was used. This information added pertinence to the perceived problems. These series of meetings were conducted at different levels within the university. That is, reunions were conducted at the professor, heads of department, school deans, and vice-presidents levels. As a result of this procedure, several actions are taking place at the present in order to solve the identified problems.

In the same way, another result of this study was for the philosophy of the Universidad de las Americas - Puebla. In this sense, if we take into account that not all of the goals were derived from the existing university's philosophy, as well as that those goals were perceived as having some degree of importance, we see that the university's philosophy will have to be redefined or completed. That is to say, because some goals were added to the goals which can be derived from the existing university's philosophy, a revision of the present philosophy will have to be made.

Another important result of this study has been observed in the level of commitment and participation of the faculty in the Institution. In this sense, because all the professors had a role in the setting of goals' priorities and in the problem identification step, an increment in their level of participation and interest has been observed.

Another very important conclusion is that of the value of the institutional goals inventory that was used in this study. Because institutions of higher education have to consider their own internal strengths and weaknesses, the use of a multidimensional instrument that provide us with information about the perceived actual and desired as well as about the relative importance of a set of institutional goals is very valuable. The importance of such an instrument is twofold. First, it allows us to make a rapid diagnosis about the institution in the present, and second, it represents an evaluation instrument with which will be possible to determine the progress towards selected goals and areas.

The participation of the faculty proved very useful for this purpose of determining department, school and university goals. The participation of the faculty from the different schools in the university made possible to have a diversity, as well as several points in common, on the

perceptions regarding goals' priorities, and perceived problems and solutions. Professors are important sources of information regarding not only the actual state of affairs in the university, but in their perceptions of problems and solutions as well.

The Weighted Need: Its Importance for the Needs Assessment Methodology

Needs assessment is generally observed as a systematic procedure aimed at identifying, defining, and prioritizing society, or institutional needs. From an institutional perspective, needs may be internal or external to the institution. Internal needs refer to the inputs, processes, and results which are within the sphere of the institution. External needs, on the other hand, are related to the demands of society which, in turn, determine, or have an impact on the institution. Therefore, needs assessment should be observed as a method that allows us to determine the needs, and consequently the demands of society on the institution (of whatever kind this may be). As mentioned above, one of the main purposes for a researcher or decision maker to use needs assessment, is to set priorities on a list of goals. Several procedures for the setting of goal priorities

there exist (Garduño, 1994). However, several limitations have been identified for each of those procedures.

The concept of "weighted need" is one that because it combines two concepts as well as two different procedures for the setting of priorities, it provides a more complete meaning of the most important goals. On the one hand, the "weighted need" tells with a single number, what are the goals in most need of attention, or, in other words, what are the objectives to be first accomplished. This information is possible because the "weighted need" combines the concepts of "Absolute Importance" and "Relative Importance". The concept of "weighted need" was very useful to answer the questions posed for this study. In a more precise manner, the concept of "weighted need" allowed us to answer to the questions concerning the most important goals (and goal areas) to be first accomplished for the university. In the same way, the concept of "weighted need" allowed us to identify the perception of professors in each of the schools regarding priority institutional goals. In conclusion, we can say that the concept and procedure of "weighted need" provides the needs assessment methodology with a new tool for facilitating the decision making process regarding the setting of goal priorities.

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